

CLAIMS

What is claimed is:

Claim 1. A protective coating comprising a homogeneous mixture of polyurea and microscopic granules thereby providing a property of diffuse reflectivity.

Claim 2. The protective coating in accordance with claim 1 wherein said microscopic granules are added to said homogeneous mixture in a range of inclusion from 0.2 to 0.8 ounces per gallon of said polyurea.

Claim 3. A protective coating in accordance with claim 1 wherein said microscopic granules capable of imparting the property of diffuse reflectivity range in size from 2 to 25 microns.

Claim 4. A protective coating in accordance with claim 2 wherein said microscopic granules capable of imparting the property of diffuse reflectivity range in size from 2 to 25 microns.

Claim 5. A protective coating in accordance with claim 1 wherein said homogeneous mixture further comprises a colored

1 pigment.

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3 Claim 6. A protective coating in accordance with claim 2
4 wherein said homogeneous mixture further comprises a colored
5 pigment.

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7 Claim 7. A protective coating in accordance with claim 3
8 wherein said homogeneous mixture further comprises a colored
9 pigment.

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11 Claim 8. A protective coating in accordance with claim 4
12 wherein said homogeneous mixture further comprises a colored
13 pigment.

14

15 Claim 9. A protective coating in accordance with claim 1
16 wherein said homogeneous mixture further comprises a
17 synthetic filler.

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19 Claim 10. A protective coating in accordance with claim
20 2 wherein said homogeneous mixture further comprises a
21 synthetic filler.

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23 Claim 11. A protective coating in accordance with claim
24 3 wherein said homogeneous mixture further comprises a

1 synthetic filler.

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3 Claim 12. A protective coating in accordance with claim
4 4 wherein said homogeneous mixture further comprises a
5 synthetic filler.

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7 Claim 13. A protective coating in accordance with claim
8 5 wherein said homogeneous mixture further comprises a
9 synthetic filler.

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11 Claim 14. A protective coating in accordance with claim
12 6 wherein said homogeneous mixture further comprises a
13 synthetic filler.

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15 Claim 15. A protective coating in accordance with claim
16 7 wherein said homogeneous mixture further comprises a
17 synthetic filler.

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19 Claim 16. A protective coating in accordance with claim
20 8 wherein said homogeneous mixture further comprises a
21 synthetic filler.

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23 Claim 17. A protective coating in accordance with claim
24 9 wherein said synthetic filler is sodium magnesium

1 aluminosilicate.

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3 Claim 18. A protective coating in accordance with claim
4 10 wherein said synthetic filler is sodium magnesium
5 aluminosilicate.

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7 Claim 19. A protective coating in accordance with claim
8 11 wherein said synthetic filler is sodium magnesium
9 aluminosilicate.

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11 Claim 20. A protective coating in accordance with claim
12 12 wherein said synthetic filler is sodium magnesium
13 aluminosilicate.

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15 Claim 21. A protective coating in accordance with claim
16 13 wherein said synthetic filler is sodium magnesium
17 aluminosilicate.

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19 Claim 22. A protective coating in accordance with claim
20 14 wherein said synthetic filler is sodium magnesium
21 aluminosilicate.

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23 Claim 23. A protective coating in accordance with claim
24 15 wherein said synthetic filler is sodium magnesium

1 aluminosilicate.

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3 Claim 24. A protective coating in accordance with claim
4 16 wherein said synthetic filler is sodium magnesium
5 aluminosilicate.

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7 Claim 25. A process for reducing thermal and radiant
8 energy transmission and absorption of a substrate comprising
9 the steps of:

10 a) providing a homogeneous mixture comprising polyurea
11 and microscopic granules that impart diffuse reflectivity;
12 and

13 b) applying the homogeneous mixture of step (a) to an
14 outer surface of said substrate;

15 wherein upon curing of said homogeneous mixture upon
16 said substrate, thermal and radiant energy transmission and
17 absorption of said substrate is reduced.

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19 Claim 26. A process for protecting a substrate from
20 thermal and corrosive exposure comprising the steps of:

21 a) providing a homogeneous mixture comprising polyurea
22 and microscopic granules that impart diffuse reflectivity;
23 and

24 b) applying the homogeneous mixture of step (a) to an

1 outer surface of said substrate;

2 wherein upon curing of said homogeneous mixture upon
3 said substrate, said substrate is protected from mechanical,
4 water, and corrosive damage, and thermal exposure.

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6 Claim 27. A protective coating comprising a homogeneous
7 mixture of polyurea and borosilicate microspheres.

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9 Claim 28. The protective coating in accordance with
10 claim 27 wherein said borosilicate microspheres are added to
11 said homogeneous mixture in a range of inclusion from 0.2 to
12 0.8 ounces per gallon of said polyurea.

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14 Claim 29. A protective coating in accordance with claim
15 27 wherein said borosilicate microspheres range in size from
16 2 to 25 microns.

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18 Claim 30. A protective coating in accordance with claim
19 28 wherein said borosilicate microspheres range in size from
20 2 to 25 microns.

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22 Claim 31. A protective coating in accordance with claim
23 27 wherein said homogeneous mixture further comprises a
24 colored pigment.

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2 Claim 32. A protective coating in accordance with claim
3 28 wherein said homogeneous mixture further comprises a
4 colored pigment.

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6 Claim 33. A protective coating in accordance with claim
7 29 wherein said homogeneous mixture further comprises a
8 colored pigment.

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10 Claim 34. A protective coating in accordance with claim
11 30 wherein said homogeneous mixture further comprises a
12 colored pigment.

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14 Claim 35. A protective coating in accordance with claim
15 27 wherein said homogeneous mixture further comprises a
16 synthetic filler.

17

18 Claim 36. A protective coating in accordance with claim
19 28 wherein said homogeneous mixture further comprises a
20 synthetic filler.

21

22 Claim 37. A protective coating in accordance with claim
23 29 wherein said homogeneous mixture further comprises a
24 synthetic filler.

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2 Claim 38. A protective coating in accordance with claim
3 30 wherein said homogeneous mixture further comprises a
4 synthetic filler.

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6 Claim 39. A protective coating in accordance with claim
7 31 wherein said homogeneous mixture further comprises a
8 synthetic filler.

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10 Claim 40. A protective coating in accordance with claim
11 32 wherein said homogeneous mixture further comprises a
12 synthetic filler.

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14 Claim 41. A protective coating in accordance with claim
15 33 wherein said homogeneous mixture further comprises a
16 synthetic filler.

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18 Claim 42. A protective coating in accordance with claim
19 34 wherein said homogeneous mixture further comprises a
20 synthetic filler.

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22 Claim 43. A protective coating in accordance with claim
23 35 wherein said synthetic filler is sodium magnesium
24 aluminosilicate.

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2 Claim 44. A protective coating in accordance with claim
3 36 wherein said synthetic filler is sodium magnesium
4 aluminosilicate.

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6 Claim 45. A protective coating in accordance with claim
7 37 wherein said synthetic filler is sodium magnesium
8 aluminosilicate.

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10 Claim 46. A protective coating in accordance with claim
11 38 wherein said synthetic filler is sodium magnesium
12 aluminosilicate.

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14 Claim 47. A protective coating in accordance with claim
15 39 wherein said synthetic filler is sodium magnesium
16 aluminosilicate.

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18 Claim 48. A protective coating in accordance with claim
19 40 wherein said synthetic filler is sodium magnesium
20 aluminosilicate.

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22 Claim 49. A protective coating in accordance with claim
23 41 wherein said synthetic filler is sodium magnesium
24 aluminosilicate.

1 Claim 50. A protective coating in accordance with claim
2 42 wherein said synthetic filler is sodium magnesium
3 aluminosilicate.

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5 Claim 51. A process for reducing thermal and radiant
6 energy transmission and absorption of a substrate comprising
7 the steps of:

8 a) providing a homogeneous mixture comprising polyurea
9 and borosilicate microspheres; and

10 b) applying the homogeneous mixture of step (a) to an
11 outer surface of said substrate;

12 wherein upon curing of said homogeneous mixture upon
13 said substrate thermal and radiant energy transmission and
14 absorption of said substrate is reduced.

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16 Claim 52. A process for protecting a substrate from
17 thermal and corrosive exposure comprising the steps of:

18 a) providing a homogeneous mixture comprising polyurea
19 and borosilicate microspheres; and

20 b) applying the homogeneous mixture of step (a) to an
21 outer surface of said substrate;

22 wherein upon curing of said homogeneous mixture upon
23 said substrate said substrate is protected from thermal and
24 corrosive exposure.